



03-08-06

Atty. Dkt. No. 040405-0363

BJW

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Junichi TAKEUCHI, et al.

Title: AUTOREGRESSIVE MODEL LEARNING  
DEVICE FOR TIME-SERIES DATA AND  
A DEVICE TO DETECT OUTLIER AND  
CHANGE POINT USING THE SAME

Appl. No.: 10/619,626

Filing Date: 7/16/2003

Examiner: Fernandez Rivas, Omar F.

Art Unit: 2129

**INFORMATION DISCLOSURE STATEMENT**  
**UNDER 37 CFR §1.56**

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

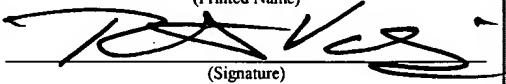
Sir:

Submitted herewith on Form PTO/SB/08 is a listing of documents known to Applicants in order to comply with Applicants' duty of disclosure pursuant to 37 CFR §1.56.

A copy of each non-U.S. patent document and each non-patent document is being submitted to comply with the provisions of 37 CFR §1.97 and §1.98.

The submission of any document herewith, which is not a statutory bar, is not intended as an admission that such document constitutes prior art against the claims of the present application or that such document is considered material to patentability as defined in 37 CFR §1.56(b). Applicants do not waive any rights to take any action which would be appropriate to antedate or otherwise remove as a competent reference any document which is determined to be a *prima facie* art reference against the claims of the present application.

13-08-06

<b>CERTIFICATE OF EXPRESS MAILING</b>	
I hereby certify that this correspondence is being deposited with the United States Postal Service's "Express Mail Post Office To Addressee" service under 37 C.F.R. § 1.10 on the date indicated below and is addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.	
EV 700373845 US (Express Mail Label Number)	March 7, 2006 (Date of Deposit)
Ruthie Vallejo (Printed Name)	
 (Signature)	

**TIMING OF THE DISCLOSURE**

The listed documents are being submitted in compliance with 37 CFR §1.97(c), before the mailing date of either a final action under 37 CFR §1.113, a notice of allowance under 37 CFR §1.311, or an action that otherwise closes prosecution in the application.

**STATEMENT**

The undersigned hereby states in accordance with 37 CFR §1.97(e)(1) that each item of information contained in this information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three (3) months prior to filing of this Statement.

The undersigned hereby states in accordance with 37 CFR §1.704(d) that each item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart application and that this communication was not received by any individual designated in 37 CFR §1.56(c) more than thirty days prior to the filing of the information disclosure statement.

**RELEVANCE OF EACH DOCUMENT**

Applicant respectfully requests that each listed document be considered by the Examiner and be made of record in the present application and that an initialed copy of Form PTO/SB/08 be returned in accordance with MPEP §609.

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The Examiner in the corresponding Japanese patent application has commented as follows:

Partial translation of Japanese Office Action

040405-0363; 10/619626

Reference 1 teaches that:

the sufficient statistic of the autoregressive model is updated as the past data is being forgotten using newly read data (refer to "3.3 Forgetting Factor Approach.");

the parameter of the autoregressive model is calculated; and

the outlier score of each data is calculated based on said parameter of the autoregressive model and the input data in order to detect the outlier value and the change point.

Since the invention of Claims 1 and 2 of the subject application is the same as the invention cited in Reference 1, it falls under Patent Law Article 29 (1.3). Hence, it cannot be granted a patent.

Furthermore, the invention of Claims 1 and 2 of the subject application could have been easily made by a person skilled in the art based on the invention cited in Reference 1. Therefore, it cannot be granted a patent.

List of Cited References

1. Vasundhara Puttagunta, et al., Adaptive Methods for Activity Monitoring of Streaming Data, Proceedings of the 2002 International Conferences on Machine Learning and Applications (ICMLA '02), U.S.A., CSREA Press, June 24, 2002, pp. 197-203, [Searched February 2, 2006], Internet <URL, <http://www.csee.umbc.edu/~kalpakis/homepage/papers/kalpakisICMLA02.pdf>>

Prior Art

1. Kenji Yamanishi et al., "Data Mining with Statistic Outlier Detection and Application to Network Invasion Detection," Technical Research Reports of the Institute of Electronics, Information and Communication Engineers, Japan, the Institute of Electronics, Information and Communication Engineers, June 14, 2002, Vol. 102, No. 132, pp. 19-24

2. JP 2001-101154

3. Ikuo Yonemoto et al., "On-line Estimation of Probability Density Function Using Information Quantity Standard," Technical Research Reports of the Institute of Electronics, Information and Communication Engineers, Japan, the Institute of Electronics, Information and Communication Engineers, December 18, 1998, Vol. 98, No. 490, pp. 189-194

This Record of Prior Art Search Results does not constitute a reason for Rejection.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 CFR §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 50-0872. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 50-0872.

Respectfully submitted,

Date March 7, 2006

By Just Saby

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Substitute for form 1449B/PTO

INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT

MAR 07 2006 Date Submitted: March 7, 2006

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## Complete if Known

Application Number	10/619,626
Filing Date	7/16/2003
First Named Inventor	Junichi TAKEUCHI
Group Art Unit	2129
Examiner Name	Fernandez Rivas, Omar F.
Attorney Docket Number	040405-0363

## U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			

## FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Documents	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
-	A1	JP	2001-101154		NEC Corporation	April 13, 2001		ABS
-	A2	GB	2361336		NEC Corporation	October 17, 2001		

## NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>6</sup>
A3		Vasundhara Puttagunta, et al., Adaptive Methods for Activity Monitoring of Streaming Data, Proceedings of the 2002 International Conferences on Machine Learning and Applications (ICMLA '02), U.S.A., CSREA Press, June 24, 2002, pp. 197-203, [Searched February 2, 2006], Internet <URL, http://www.csee.umbc.edu/~kalpaki/homepage/papers/kalpakiICMLA02.pdf>	
A4		Kenji Yamanishi et al., "Data Mining with Statistic Outlier Detection and Application to Network Invasion Detection," Technical Research Reports of the Institute of Electronics, Information and Communication Engineers, Japan, the Institute of Electronics, Information and Communication Engineers, June 14, 2002, Vol. 102, No. 132, pp. 19-24	
A5		Ikuro Yonemoto et al., "On-line Estimation of Probability Density Function Using Information Quantity Standard," Technical Research Reports of the Institute of Electronics, Information and Communication Engineers, Japan, the Institute of Electronics, Information and Communication Engineers, December 18, 1998, Vol. 98, No. 490, pp. 189-194	

Examiner Signature

Date Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup>See attached Kinds of U.S. Patent Documents. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.